

**PROJECT DESCRIPTION**

**I. GENERAL**

This project involves the installation of a new traffic control signal at the intersection of US 40 and Centre Blvd. in Washington County, Maryland. US 40 is considered to run in an east/west direction.

**II. INTERSECTION OPERATION**

The intersection is to operate in NEMA four (4) phase, full traffic-actuated mode. There will be an exclusive left turn phase for the eastbound movement of US 40. The US 40 through movements will operate concurrently. The Centre Blvd. movements will operate alone.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, three 4-channel rack mounted time delay output loop detector amplifiers, and all necessary equipment for telemetry interconnect housed in a base mounted cabinet are to be installed at this location.

**EQUIPMENT LIST**

A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm pole with 38 ft. mast arm [Note: four 1-1/2 in. x 60 in. anchor bolts].
1	EA	818	27 ft. steel twin mast arm pole with 50 ft. and 60 ft. mast arms [Note: four 2 in. x 90 in. anchor bolts].
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, three 4-channel rack mounted loop detector amplifiers, and telemetry interconnect equipment [Note: Controller and cabinet shall be supplied by Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].
8	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	813	42 in. x 84 in. R 3-5b (Mod.) sign with mast arm mounting hardware.
4	EA	813	48 in. x 48 in. W 3-3 "NEW" sign for ground mounting.
1	EA	806	15 ft. luminaire arm.
1	EA	806	20 ft. luminaire arm.
2	EA	806	250 W H.P.S. lamp and luminaire.

B. Equipment to be furnished and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
3	CY	205	Test pit excavation.
14	EA	811	Handhole.
875	LF	815	Sawcut for signal loop detector.
3050	LF	810	Loop detector wire (No. 14 A.W.G.) enclosed in flexible tubing.
350	LF	810	2-conductor tray cable (No. 12 A.W.G.).
3450	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
850	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
25	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
25	LF	810	3-wire (No. 8 A.W.G.) electrical cable.
175	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
70	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
875	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
360	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
200	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
20	LF	805	4 in. polyvinyl chloride [Schedule 40] electrical conduit - trenched.
8.55	CY	801	Concrete foundation for traffic signal equipment.
4	EA	804	Ground rod 3/4 in. diameter x 10 ft. length.
1	EA	807	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-13 underground electrical service.
105	LF	550	24 in. wide HAPPTPM - white for stop line.
164	LF	812	4 in. x 6 in. wood sign support.
1	EA	---	Cut, clean, galvanize, and cap mast arm.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

**CONTACT LIST**

The contact persons for District #6 are as follows:

Mr. Fred Crozer  
District Engineer  
301-729-8486

Mr. George Small  
Assistant District Engineer - Traffic  
301-729-8444

Mr. Larry Humbertson  
Assistant District Engineer - Utility  
301-729-8420

Mr. George Frankberry  
Assistant District Engineer - Maintenance  
301-729-8457

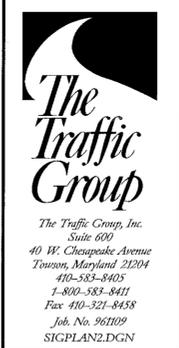
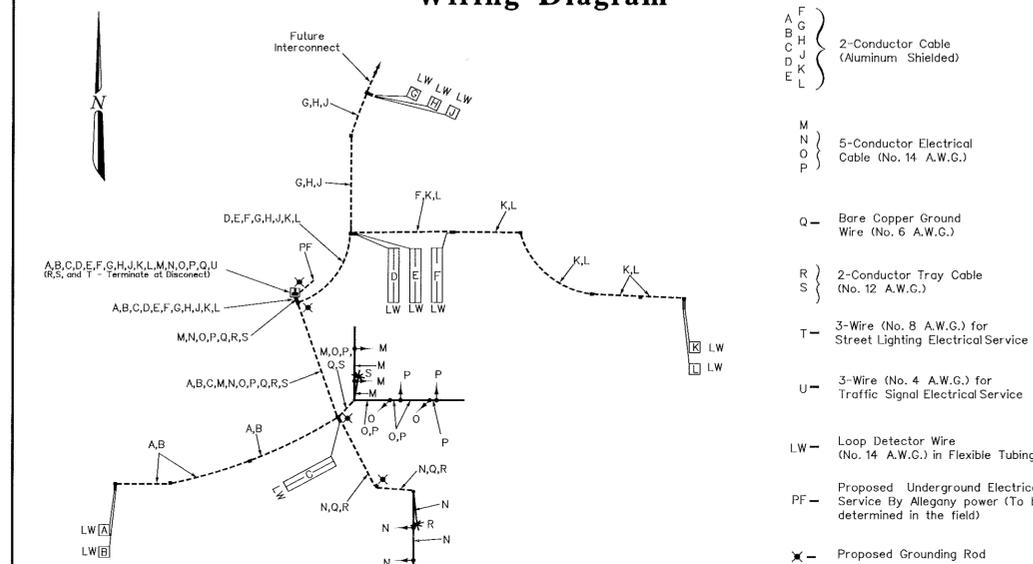
Mr. Richard L. Daff  
Chief, Traffic Operations Division  
410-787-7630

The Power Company Representative is:  
Alegany Power and Electric Company  
Mr. David Ditto  
P.O. Box 397  
Williamsport, Maryland 21795  
301-582-5247

**Phase Chart**

	1	2	3	4	5	6	7	8	
	(R) (Y) (G)								
Phase 1 & 6	R	R	G	G	G	G	R	R	→
1 Change	R	R	G	G	Y	Y	R	R	→
Phase 2 & 5	G	G	G	G	R	R	R	R	←
2 & 6 Change	Y	Y	Y	Y	R	R	R	R	←
Phase 4	R	R	R	R	R	R	G	G	↓
4 Change	R	R	R	R	R	R	Y	Y	↓
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	↕

**Wiring Diagram**



**MDOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
(General Information)

**US 40 at Centre Blvd.**

DATE: June 4, 1999 LOG MILE \*

DRAWN BY: F. Hoeckel	F.A.P. NO. N/A	PLAN SHEET NO.:	SHEET NO.
CHK. BY: (Chk. By)	S.H.A. NO. BW996M82	3908-GI	2 of 2
SCALE: N/A	COUNTY: Washington		

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